Eng. Lib.

TELEPHONY

THE AMERICAN TELEPHONE JOURNAL

INDEX TO VOLUME 104

JANUARY 7 to JUNE 24, 1933

TELEPHONY PUBLISHING CORPORATION
608 S. Dearborn Street
CHICAGO

Immediately following the title of the articles in this index will be found the number of the issue, followed by the page number. Thus, 10–14 means issue No. 10, page 14. Articles designated by an asterisk (*) are illustrated.

A

A Century of Progress:
Communication needs of a world's fair,* 24–12.
Telephone exhibit at Exposition,* by Stanley R. Edwards, 23–8.

Accident prevention:
A page of safety practice suggestions,* 14–27.
"Safety first" articles, by Jake the Lineman, 1–23, 2–16, 3–16, 4–25, 5–26, 6–26, 7–18, 8–25, 9–18, 10–16, 11–17, 12–28, 13–23, 14–19, 15–17, 16–24, 18–18, 19–16, 20–23, 21–14, 23–16, 24–16.

Accounting: State commissions object to I. C. C. uniform accounting order, 1–26, 16–32, 25–25.

Aerial leads, Suspension stresses in,* by E. F. Keyes, 6–10.

Associated Telephone & Telegraph Co.: Bankruptcy suit to be fought, 4–21; dismissed, 10–26.

Associated Telephone Utilities Co.: Receivership suit filed, 7–26, 9–26, 14–34, 15–28, 17–28, 22–18, 25–31.

B

Bell:
System's financial report shows stability,* 7–14.
Telephone exhibit at A Century of Progress,* by Stanley R. Edwards, 23–8.
Unification of research branches of Bell System started, 17–17.

Book reviews:
National Association of Railroad and Utilities Commissioners' 1932 convention proceedings, 6–33.
Standard handbook for electrical engineers, by staff of specialists, Frank F. Fowle, editor-in-chief, 8–33.
Telephone theory and practice: Manual switching and substation equipment, by Kempster B. Miller, 10–33.
Telephone theory and practice: Automatic switching and auxiliary equipment, by Kempster B. Miller, 10–34.
The development of American industries, by Glover and Cornell, 6–33.

Buy now:
Another reason for buying now, 20–15.
Good argument in favor of buying supplies now,* 16–25.
How policy will help the telephone industry, 11–9 (Editorial).
Old telephones removed from service; buy new ones now, 12–7.
Purchase supplies now, 13–8.
Some phases of the movement, 14–30.
Supporting Independent manufacturers,* by W. L. Runzel, 13–16.
Telephone rates and inflation—an argument for "buy now," 17–9 (Editorial).
The Independent manufacturer's problem, by H. E. Billington, 19–23.

C

Cables:
Locating moisture in dry-paper, insulated, by H. C. Tucker, 13–23.
Old cable splicer articles, 1–23, 2–17, 3–16, 4–26, 6–25, 8–25, 9–18, 10–17, 15–17, 22–23, 24–16.

California:
Telephone people "carry on" during and following earthquake, 15–16.
Telephone service during a disaster,* by Frank Davies, 24–8.
The earthquake and telephone company,* 15–11.

Campaigns:
Kansas association conducts successful campaign for telephones, 22–25.
Better telephone salesmanship,* by S. K. Beecher, 7–33.
Merchants of Aberdeen, S. D., conduct campaign for business,* 21–15.
Nebraska companies cooperating in "business recovery campaign," 25–18.
Right now is the time to sell service,* by Dan Hughes, 23–14.

Central office, Renovating equipment in, by Ray Blain, 14–15.

Coin-box: Decision in Illinois Bell Telephone Co.'s Chicago case, 18–10; appeal recommended, 20–26.

Commercial:
In a time like this—we find?—and do?,* by H. F. McCulla, 16–10.
Reducing expenses to conform to income,* by Wm. C. Henry, 20–8.
Transpositions in business methods, by M. P. Grogan, 13–9.
"You, your company, and your public," by E. R. Cogswell, 2–10.

Commissions:
Charges Ohio companies paid dividends from capital, 17–30.
Nebraska commission seeks quarterly reports by exchanges, 11–31, 18–30.
Nebraska testing out effect of rate reductions at Osmond exchange, 19–26, 22–28, 23–32, 25–25.
New class of service for Edgemont, Ill., exchange, 9–28.
New York Telephone Co.'s rule on risks for interruption of service, 8–27, 10–27, 12–25, 13–28, 25–35.
Northwestern Bell Telephone Co. renews effort to acquire St. Paul, Minn., system, 13–24, 14–32, 15–30, 21–17 and 18, 24–34.
Rate investigation of Northwestern Bell Telephone Co. in Nebraska, 14–35, 16–18, 22–30, 23–28, 25–16.
Rural and switching rates of Northwestern Bell Telephone Co. under investigation, 12–24, 19–29, 22–30.
Rural exchange established outside of Grantsburg, Wis., 23–31.
South Carolina orders Southern Bell rates cut, 4–27.
Tennessee on utility rates, 17–23.
Wisconsin approves holding company contract, 5–32.
Wisconsin Telephone Co. investigation costs, 7–30, 19–25, 20–27; company pays, 22–36.

Common battery: Automatic charging for small plants,* by C. E. Bohnenblust, 11–18.

Construction:
Iron pipe under river cable crossing, Manitowoc, Wis.,* 14–25.
Items in plant work at Woodbine, Iowa,* 14–19.

Conventions:
Annual meeting of the American Wood Preservers' Association, 5–27.
Indiana shows confidence,* by Stanley R. Edwards, 20–11.
Iowa talks over general conditions,* by Stanley R. Edwards, 9–10.
Kansas association meets at Abilene,* by Dan Hughes, 16–14.
Minnesoto hears farm industry's leaders,* by Stanley R. Edwards, 5–10.
Nebraska's round-table convention,* by H. T. Dobbins, 8–8.
New officers of consolidated cedar pole associations, 14–14.
Ohio sees better conditions at annual,* by Stanley R. Edwards, 17–10.
Oklahoma holds annual,* 12–11.
Pennsylvania's fine annual,* 22–13.
South Dakota's one-day convention,* 15–13.

Costs:
Of living since 1914 compared with telephone rates, 19–15.
Wisconsin Telephone Co. holds assessment costs invalid, 7–30, 19–25; commission upholds costs of rate investigation, 20–27; company pays, 22–36.

Court cases:
Bexar county (Texas) to try Southwestern Bell tax suit on its merits, 7–31; company wins, 20–26.
Manager in Nebraska wins court fight with bank receiver, 6–31; receiver appeals to supreme court, 10–27.
Rehearing of San Antonio, Texas, case taken under advisement, 23–27.
Southwestern Bell retires from competitive point at Humble, Texas, 6–31.
Wisconsin Telephone Co.'s 12½ per cent rate reduction case before federal court in February, 4–27; case remanded, 13–24.

Court rulings:
A. T. & T. Co. held liable in unusual accident, 14–39.
Commission overruled in Pelican Rapids, Minn., case, 25–25.
Company wins in suit on ownership of stub rural line, 6–31.
Decision concerning removal of conduits at utility's cost, 9–28.
Decision in Illinois Bell Telephone Co.'s Chicago case, 18–10; appeal recommended, 20–26.
Federal supreme court upholds order fixing rates, 23–30.
Higher court reverses order of lower court in damage suit, 22–29.
Local property unit for rate-making at Martinsville, Ind., 4–23.
Order reducing switching charge at Fergus Falls, Minn., reversed by high court, 18–29.
Power company's refusal to furnish service for resale upheld, 20–27.
South Carolina commission held without power to change fixed rates, 18–28.
Telephone numbers are property of company, 3–31.
Utility held not liable for customer's fire loss, 7–30.

D

Data sheets: "Telephony's engineering,* by B. C. Burden, 1–32, 2–34, 3–32, 4–34, 5–31, 6–34, 7–34, 8–34, 11–34, 12–34, 13–32, 14–38, 15–34, 16–34, 17–32, 18–34, 19–34, 20–34, 21–33, 22–34, 23–34, 24–33, 25–33.

Depreciation:
Ask extension of dates on parts of I. C. C. order, 16–32; granted, 23–27.
Hearings on proposed rate reductions and depreciation limit in North Carolina, 20–27, 22–29, 23–35, 24–34.

E

Editorials:
An economist looks at telephone rates; business recovery, 25–7.
Fire losses and telephone alarms; some statistics on them, 22–9.
New governors, utilities; legislation and small communities, 3–9.
Telephone and farm industries; federal regulation (Rayburn) bill, 6–9.
The campaign against utilities and state commissions, 21–7.

Electric light association dissolved, 8–24.

England:
"Demand trunk working" in,* by R. S. Osborne, 12–32.
Telephone News from Great Britain, by "Telephony's" special London correspondent, 3–14, 8–18, 12–12, 21–12, 25–12.

F

Financial:
A. T. & T. Co. net earning for quarter $1.72 a share, 16–27.
Bell of Canada's 1932 revenues down, 12–16.
Bell of Pennsylvania shows revenue decrease of 11 per cent, 21–24.
Bell System's report shows stability,* 7–14.
Business for Jamestown (N. Y.) company decreased in 1932, 21–32.
Central West Public Service Co. management plans refunding, 16–27.
Dakota Central's annual report, 12–14.
Illinois Bell reports decline last year, 7–28.
Indiana Bell reports 1932 net earnings, 12–21.
Interstate Commerce Commission's reports for November, 7–25; December, 12–16; January, 21–23; February, 21–28; March, 25–28.
Lincoln (Neb.) company's difficult year,* 6–23.
New Jersey Bell earns lower net; dividend cut, 25–31.
New York Bell dipped into surplus to pay 1932 dividends, 12–13.
Ohio Bell's large station loss last year, 16–28.
Pacific T. & T. Co. reports annual deficit after dividends, 16–28.
Platte Valley corporation in Nebraska shows deficit for 1932, 21–28.
Regular 1932 dividends paid by all but four Bell companies, 7–36.
Several associated Bell companies reduce dividends, 12–21.
Telephone Bond & Share Co.'s 1932 operating revenue drops, 21–24.
Wisconsin Bell earnings drop, 12–14.

Florida: Marianna's new service,* by A. B. Pogue, 20–33.

Foreign:
Anglo-Portuguese Telephone Co. holds successful dance,* 17–17.
Furnishing service in Japan, 10–18.
Mediterranean Island's telephone service,* by S. C. Reade, 19–33.
Report of Swedish federal telephone service for 1932, 25–11.
Rural telephones in western Australia,* by Walter Buchler, 2–14.
Some comments from Rumania on transmission testing,* by J. H. Holmes and H. A. van Nievelt, 22–23.
Telephone news from foreign lands, 2–18, 15–23.

H

Handsets:
Australia will not furnish handsets; subscribers buy them, 12–35.
Connecticut: Charge reduced by Southern New England Telephone & Telegraph Co., 17–28.
Illinois: Case on charge of Illinois Bell Telephone Co. taken under advisement, 3–30; charge limited to three years, 20–16.
Kansas Telephone Co. revises its charge, 22–28.
Massachusetts: New England T. & T. Co. reduces rental, 17–28.
Minnesota: Commission orders charge for year, 10–26.
Missouri: Southwestern Bell to reduce charge, 24–34.
Nebraska: Commission cites Northwestern Bell to defend handset charge, 24–35.
New Hampshire: Charge reduced by New England T. & T. Co., 19–29.
New Jersey: Extra charge of New Jersey Bell company reduced, 15–30; bill limiting rate passes House, 19–28.
New York: Commission reduces extra charge of New York Telephone Co., 15–28; rehearing denied, 18–30.
Ohio: Case taken under advisement, 13–26; charge limited to three years by Ohio Bell and Cincinnati & Suburban companies, 17–28.
Pennsylvania: Extra charge ordered discontinued by Bell company after two years, 10–32.
Rhode Island: Rate reduced by New England T. & T. Co., 20–27.
South Dakota: Monthly charge of Northwestern Bell Telephone Co. limited to three years, 24–34.
Wisconsin: Commission to hold hearing on charge of Wisconsin Telephone Co., 20–27; indefinitely postponed, 21–34.

Hotels: Rates and practices for hotel service in Wisconsin, 3–18.

I

"I wonder why" of an observing, traveling telephone engineer,* 2–16, 3–17, 11–18, 15–18, 18–18, 23–16.

Engin. Mehr

Illinois:
Decision in Illinois Bell Telephone Co.'s Chicago case, 18-10; appeal recommended, 20-26.
Equipment installed for future growth at Marseilles,* by H. A. Seamark, 15-26.
Indiana:
Convention shows confidence,* by Stanley R. Edwards, 20-11.
Local property unit for rate-making at Martinsville, 4-23.
Insurance:
Fire losses and telephone alarms; some statistics on them, 22-9.
Interstate Commerce Commission:
Ask extension of dates on parts of depreciation order, 16-32; granted, 23-27.
Hearings on objections of state commissions to accounting order, 1-26, 16-32, 25-25.
Northwestern Bell Telephone Co. renews effort to acquire St. Paul, Minn., system, 13-24, 14-32, 21-18, 24-34.
Iowa:
Bloomfield solves exchange problem,* by F. B. Knefel, 4-33.
Operators' traffic conference during annual convention,* 9-15.
Talks over general conditions at convention,* by Stanley R. Edwards, 9-10.

K

Kansas:
Association conducts successful campaign for telephones, 22-25.
Association meets at Abilene,* by Dan Hughes, 16-14.
Public service and securities commissions consolidated, 15-28.

L

Legislation:
Indiana bill for reorganizing commission passed by House, 8-27.
Indiana's gross income tax affects utilities and employes, 10-27.
Massachusetts legislature lukewarm as to rate inquiry, 18-26; frowns on special inquiry, 21-17.
Massachusetts' possible dividend taxation, 13-26.
Nebraska companies protest maximum rate bill, 11-30; action indefinitely postponed, 17-29.
North Carolina legislature creates single utilities commissioner, 13-25.
Rayburn bill for communications and power commission, 5-32, 6-9, 12-23.
Lighting: Proper light an aid to good work,* by John A. Bracken, 1-17.

M

Maintenance:
Consistent maintaining of exchanges,* by Arthur O. Black, 24-14.
Inspection and repair of outside plant,* by B. C. Burden, 14-10.
Place used magneto sets in condition, by U. S. Hannum, 12-8.
The engineer in maintenance work, by Ray Blain, 21-11.
Manufacturers:
Supporting Independent,* by W. L. Runzel, 13-16.
The Independent manufacturer's problem,* by H. E. Billington, 19-23.
Massachusetts: Boston rate investigation of New England Telephone & Telegraph Co., 1-26, 2-30, 3-30, 5-33, 10-30, 11-26, 12-22, 14-16, 15-24, 16-33, 17-26, 18-26, 19-21, 20-24, 23-25, 24-26, 25-14.
Merger: Of Western Union with Postal Telegraph seen, 23-27; dropped from bill, 24-24.
Minnesota:
Convention hears farm industry's leaders,* by Stanley R. Edwards, 5-10.
Northwestern Bell renews effort to acquire St. Paul system, 13-24, 14-32, 15-30, 21-17, 21-18, 24-34.
Order reducing switching charge at Fergus Falls reversed by high court, 18-29.
The telephone industry in,* by R. F. Wilder, 5-16.
Missouri: A modern small exchange in Union,* by P. Winemiller, 13-30.
Music transmission over wires, New tone quality in, 22-24.

N

Nebraska:
Cambridge exchange modernized,* by F. B. Knefel, 22-33.
Police and fire departments' system at Lincoln,* by H. T. Dobbins, 10-25.
Northwestern Bell Telephone Co.'s rate investigation, 6-30, 8-27, 14-35, 16-18, 22-30, 23-28, 25-16.
Round-table convention,* by H. T. Dobbins, 8-8.
New York: Relationship between New York Telephone Co. and "Red Book" publishers, 13-28, 15-28, 18-30, 19-25.
North Carolina: Hearings on proposed rate reductions and depreciation limit in, 20-27, 22-29, 23-25, 24-34.

O

Ohio:
Association's letters to former subscribers of companies, 25-18.
Convention sees better conditions,* by Stanley R. Edwards, 17-10.
Fire in historic exchange at Adario,* by R. C. Arter, 11-33.
New police system at Middletown,* by H. S. Williams, 1-30.
Small exchange, modernization in,* by R. C. Arter, 15-33.
Oklahoma: Holds annual convention,* 12-11.

P

Pennsylvania:
Fine annual convention,* 22-13.
Plant:
Capacity meter to determine distance to cable circuit "open,"* by Joseph T. Kilmer, 10-17.
Exchange pole-changers can be whipped,* by D. H. Townsend, 21-8.
Inspection and repair of outside,* by B. C. Burden, 14-10.
Items in construction work at Woodbine, Iowa,* 14-19.
New car for installers and combination men,* 3-17.
New developments in making wire joints,* by T. De Witt Talmage, 19-11.
New order turret equipment developed,* by H. M. Hagland, 2-30.
Suspension stresses in aerial leads,* by E. F. Keyes, 6-10.
The engineer in maintenance work, by Ray Blain, 21-11.
Wires for use in subscribers' premises,* by J. B. Dixon, 1-12.
Pole-changers can be whipped, Exchange,* by D. H. Townsend, 21-8.
Poles:
Common-sense pole specifications,* by C. M. Tilley, 14-36.
Public relations:
Telephone service and public relations with subscribers, by H. R. Wolle, 23-17.
The improving of,* by W. J. Hutchins, 10-12.
The maintenance of,* by J. Warren Safford, 19-8.
The value of a personalized service,* by G. K. McCorkle, 22-10.
Purchases—See Sales.

R

Radio system proposed to compete with wire telegraph, 4-28.
Radio telephone:
Replaces submarine cable in Lake Erie, 24-29.
Rate cases:
Company fights lower rates for St. Petersburg, Fla., at hearings, 23-28.
Decision in Illinois Bell Telephone Co.'s Chicago case, 18-10; appeal recommended, 20-26.
Federal court stays proceedings in Michigan Bell Telephone Co. case, 2-30; attorney-general seeks rate cut, 3-30.
Federal statutory court modifies Marion, Ohio, refund order, 24-34.
Hearings on rate reductions and depreciation limit in North Carolina, 20-27, 22-29, 23-35, 24-34.
Hearings started in investigation of Southern California company, 7-30, 23-28.
Nebraska investigation of Northwestern Bell Telephone Co., 6-30, 8-27, 14-35, 16-18, 22-30, 23-28, 25-16.
New England Telephone & Telegraph Co., Boston, Mass., 1-26, 2-30, 3-30, 5-33, 10-30, 11-26, 12-22, 14-16, 15-24, 16-33, 17-26, 18-26, 19-21, 20-24, 23-25, 24-26, 25-14.
Northern Texas company appeals to court over rates in Sherman, 20-26.
Ohio Associated Telephone Co. case, involving Dover and New Philadelphia, before Ohio supreme court, 8-27; increased rates approved, 18-30.
Rural and switching rates of Northwestern Bell Telephone Co. under investigation, 12-24, 19-29, 22-30.
South Carolina commission considers rehearing of Southern Bell case, 8-27.
Southwestern Bell Telephone Co. ordered to restore old rates at San Antonio, Texas, 9-28; to appeal case, 13-25.
Testimony concluded in Ohio Bell Telephone Co. case, 1-33; awaiting court decision in Chicago case, 17-30.
Tri-State Telephone & Telegraph Co., St. Paul, Minn., 3-30, 5-34.
Wisconsin Telephone Co.'s 12½ per cent rate reduction case before federal court in February, 4-27; case remanded, 13-24.
Wisconsin Telephone Co. statewide investigation, 3-31, 4-27, 11-25, 12-25, 13-27, 15-30, 16-35, 17-29, 18-31, 19-26 and 28, 22-28, 24-28, 25-26.
Rates:
Booklet tells the rate story,* 13-13.
Costs of living since 1914 compared with telephone, 19-15.
Nebraska companies faced with trying problems, 9-26.
These telephone rates; tell your story! by a long, slim "small" telephone man, 7-13.
Receiverships:
Associated Telephone Utilities Co. in receivership, 7-26, 9-26, 14-34, 15-28, 17-28, 22-18, 25-31.
Receivers of Standard Telephone Co.; bondholders' committees, 18-28.
Warren, Ohio, company in receivership; rate case delayed, 21-17; court holds receiver illegal, 25-34.
Regulation:
Rayburn bill for communications and power commission, 5-32, 6-9, 12-23.
The depression and utility,* by Frank Milhollan, 7-10.
Remote-controlled telephone exchanges,* by F. R. McBerty, 21-25.
Repair:
Inspection and repair of outside plant,* by B. C. Burden, 14-10.
Renovating central office equipment, by Ray Blain, 14-15.
Rural:
And switching rates of Northwestern Bell Telephone Co. under investigation, 12-24, 19-29, 22-30.
Commission overruled in Pelican Rapids, Minn., case, 25-25.
Exchange established outside of Grantsburg, Wis., 23-31.
Rates and development factors in Nebraska, 22-30.

S

Safety first:
A page of safety practice suggestions,* 14-27.
Articles by Jake, the Lineman, 1-23, 2-16, 3-16, 4-25, 5-26, 6-26, 7-18, 8-25, 9-18, 10-16, 11-17, 12-28, 13-23, 14-19, 15-17, 16-24, 18-18, 19-16, 20-23, 21-14, 23-16, 24-16.
Sales:
Amiret, Minn., properties sold, 12-21.
Commission approves Owego (N. Y.) transfer, 6-31.
Milroy, Minn., transfer approved, 13-28.
Neppel, Wash., system sold to Pacific Bell, 7-31.
Of Wright county, Minn., properties approved, 6-30.
Pennsylvania Bell authorized to purchase properties, 23-35.
Sale of Ward, Colo., exchange approved, 14-35.
Salisbury Center, N. Y., company sold to New York Bell, 1-35, 14-39.
Sales campaign:
Charlottesville, Va., successful,* 2-27.
Kansas association conducts successful campaign for telephones, 22-25.
West Coast Telephone Co. results of 1932, 3-27.
Salesmanship: Better telephone campaign,* by S. K. Beecher, 7-33.
Secretarial service, Salina (Kans.) building provides, 9-23.
Selling:
In a time like this—we find?—and do?,* by H. F. McCulla, 16-10.
Our mind and our business today,* by Abbott D. Spaulding, 11-10.
Promotion of sales by operators, by Margaret Rustan, 9-16.
Right now is the time to sell service,* by Dan Hughes, 23-14.
"Selling the Service" articles, by John G. Reynolds, 2-25, 3-15, 4-15, 5-23, 6-18, 7-23, 8-17, 9-24, 10-24, 11-24, 12-9, 13-9, 14-17, 15-15, 17-18, 18-23, 19-15, 20-17, 21-31, 22-26, 23-30, 24-15, 25-17.
Weakest link in telephone sales chain,* by C. W. Motter, 6-15.
Ship-to-shore telephone service for Great Lakes area, 22-26.
Small exchanges:
Consistent maintaining of,* 24-14.
Hebron, Texas, telephone problem,* by G. A. Berting, 23-33.
Improved method for notifying firemen, 4-16.
Some telephone things I didn't know until now, by Oscar Will Tell, 1-25, 4-16, 7-23, 10-23, 13-17, 18-23, 21-16, 24-18.
South Dakota: One-day convention,* 15-13.
Submarine cable: Crossing at Manitowoc, Wis.,* 14-25.
Sundry snapshots along the trail, by Well Clay, 18-17.
Switchboard: Old equipment and improvements, by A. Pioneer, 4-26.
Switching rates: Order in Fergus Falls, Minn., case reversed, 18-29.

T

Telemeter: Sends record over telephone circuits, 2-24.
Telephone:
Average cost per message in several countries, 13-18.
Bell System losses in 1932, 4-21.
Booklet tells the rate story,* 13-13.
Borrowed telephones, by Winifred Tatum, 9-24.
Business outlook of telephone industry,* by J. Warren Safford, 4-10.
Canadian statistics for 1931; slight decreases shown, 2-15.
Contest on "The necessity of a telephone on the farm," 4-15.
Development of the world declined during 1931, 13-14.
Minnesota newspaper discusses "the telephone situation," 8-16.
Of the world and United States, 24-17.
The industry in Minnesota,* by R. F. Wilder, 5-16.
The industry and its future,* by P. M. Ferguson, 3-13.
When the telephone was young in Washington, D. C., by Frank Hall Childs, 13-17.
Telephone service:
Cost of producing service at Gaston, Ind., 10-23.

During an earthquake disaster,* by Frank Davies, 24–8.

Telotimer: Station-saving device,* by E. C. Blomeyer, 21–30.

Tennessee: Commission on utility rates, 17–23.

Texas: Small town's telephone problem at Hebron,* by G. A. Berting, 23–33.

Toll:
Adjusted toll revenue chart indicates business conditions,* by J. H. Glidden, 8–16.
Revenue accounting office counts toll tickets by weighing them, 14–37.

Toll test boards, An improved bridge for,* by A. J. Pascarella, 11–13.

Traffic:
Accuracy and the timing of toll tickets, by Sara E. Neary, 6–16.
Advantages of "quiet operating," by Eva Frazier, 19–13.
Connecting company public relations, by Mary C. McCarthy, 13–15.
Cooperation between toll and P. B. X. operators, by Rosalie Stuber, 2–23.
Customer contacts, by Pearl Schnitzmeier, 19–13.
Improved methods in small exchanges for notifying firemen, 4–16.
Iowa operators' annual conference,* 9–15.
Lends a hand in keeping highways and byways clear, by Marie Hanny, 1–15.
On the outside looking in at central, by Mrs. Mayme Workman, 25–8.
Operator 1933—the master-builder,* by Margaret Celeste Grace, 8–14.
Promotion of sales by operators, by Margaret Rustan, 9–16.
Section management in the central office, by Mary E. Wilhelm, 3–10.
Some qualifications for a night operator, by Hazel Gillaspey, 1–15.
The development of supervisors,* by Marguerite P. Croake, 10–14.
The requirements of a chief operator,* by Ruth Foster, 4–13.
Value of central office telephone records, by Myrtle Anderson, 2–23.
Value of good local telephone service, by Myrtle Ray, 15–8.
What operators want to know, by Mrs. Mayme Workman, 1–14, 2–15, 3–12, 4–14, 5–15, 6–14, 7–24, 8–13, 9–14, 10–11, 11–16, 12–10, 13–12, 14–14, 15–10, 16–13, 17–16, 18–16, 19–10, 20–10, 21–12, 22–12, 23–24, 24–11, 25–11.

Transmission:
Some comments from Rumania on testing,* by J. H. Holmes and H. A. Van Nievelt, 22–23.
Testing: no calculations,* by Robert A. Fox, 10–9.

Transpositions in business methods, by M. P. Grogan, 13–9.

U

Utilities:
Amendment to Minnesota bill concerning telephone utilities recommended, 4–27.
Decision concerning removal of conduits at utility's cost, 9–28.
Drastic operating economies urged by New York Commission, 8–28.
Held not liable for customer's fire loss, 7–30.
Indiana's gross income tax affects utilities and employes, 10–27.
Tennessee commission on utility rates, 17–23.
The depression and utility regulation,* by Frank Milhollan, 7–10.

V

Vail medals, Three New York Telephone Co. employes awarded, 23–18.

W

Western Union and Postal Telegraph merger plans, 23–27, 24–24.

Wire joints: New developments in making,* by T. De Witt Talmage, 19–11.

Wires: For use in subscribers' premises,* by J. B. Dixon, 1–12.

Wisconsin:
Citizens with riot guns to guard county, 6–18.
New year greeted with sleet storm at Mosinee,* by Joseph Edwards, 2–25.
Rates and practices for hotel service, 3–18.
Wisconsin Telephone Co. costs of investigation, 7–30, 19–25, 20–27; company pays, 22–36.
Wisconsin Telephone Co.'s 12½ per cent rate reduction case before federal court in February, 4–27; case remanded, 13–24.
Wisconsin Telephone Co. statewide rate investigation, 3–31, 4–27, 11–25, 12–25, 13–97, 15–30, 16–35, 17–99, 18–31, 19–26 and 28, 22–28, 24–28, 25–26.

Index of Authors

Anderson, Myrtle: Value of central office telephone records, 2–23.

Arter, R. C.:
Fire in historic exchange at Adario, Ohio.* 11–33.
Small exchange modernization in Ohio,* 15–33.

Barnes, Anne: January and Happy New Year, 1–16; luck, 2–24; what to do about it?, 3–27; the woman next door, 4–12; play, 6–17; sobs, sniffles and smiles, 7–32; bricks and mortar, 8–15; stars and just folks, 10–15; genius or industry, 12–24; his color scheme, 13–11; to win, 14–26; near to mental spectacles, 16–12; sentiment, 17–14; quickness, 18–12; undug ground, 19–14; faith, 20–15; thoughts, 21–16; interruptions, 22–18; safety valves, 23–15; poker face, 24–18; shadows, 25–10.

Beecher, S. K.; Better telephone salesmanship campaign,* 7–33.

Berting, G. A.: Hebron, Texas, telephone problem,* 23–33.

Billington, H. E.: The Independent Manufacturer's problem,* 19–23.

Black, Arthur O.: Consistent maintaining of exchanges,* 24–14.

Blain, Ray:
Engineer in maintenance work, 21–11.
"I wonder why" of an observing, traveling telephone engineer,* 2–16, 3–17, 11–18, 15–18, 18–18, 23–16.
Renovating central office equipment, 14–15.

Blomeyer, E. C.: The telotimer; a station-saving device, 21–30.

Bohnenblust, C. E.: Automatic charging for small common battery plants,* 11–18.

Bracken, John A.: Proper light an aid to good work,* 1–17.

Buchler, Walter: Rural telephones in western Australia,* 2–14.

Burden, B. C.:
Inspection and repair of outside plant,* 14–10.
"Telephony's" engineering data sheets, 1–32, 2–34, 3–32, 4–34, 5–31, 6–34, 7–34, 8–34, 11–34, 12–34, 13–32, 14–38, 15–34, 16–34, 17–32, 18–34, 19–34, 20–34, 21–33, 22–34, 23–34, 24–33, 25–33.

Childs, Frank Hall: When the telephone was young in Washington, D. C., 13–17.

Clay, Well: Sundry snapshots along the trail, 18–17.

Cleaver, Geraldine: Improved method in small exchanges for notifying firemen, 4–16.

Cogswell, E. R.: "You, your company, and your public," 2–10.

Corman, D. B.: A quick change of equipment at Salem, Ind.,* 9–32.

Croake, Marguerite P.: The development of traffic supervisors,* 10–14.

Davies, Frank: Telephone service during an earthquake disaster,* 24–8.

Dixon, J. B.: Wires for use in subscribers' premises,* 1–12.

Dobbins, H. T.:
Nebraska's round-table convention,* 8–8.
Police and fire departments' system,* 10–25.

Edwards, Joseph: New year greeted with sleet storm at Mosinee, Wis.,* 2–25.

Edwards, Stanley R.:
Indiana convention shows confidence,* 20–11.
Iowa talks over general conditions at convention,* 9–10.
Minnesota convention hears from industry's leaders,* 5–10.
Ohio convention sees better conditions,* 17–10.
Telephone exhibit at A Century of Progress,* 23–8.

Ferguson, P. M.: The telephone industry and its future,* 3–13.

Foster, Ruth: The requirements of a chief operator,* 4–13.

Fox, Robert A.: Transmission testing; no calculations,* 10–9.

Frazier, Eva: Advantages of "quiet operating," 19–13.

Gillaspey, Hazel: Some qualifications for a night operator, 1–15.

Glidden, J. H.: Adjusted toll revenue chart indicates business conditions,* 8–16.

Grace, Margaret Celeste: Operator 1933—the master-builder,* 8–14.

Grogan, M. P.: Transpositions in business methods, 13–9.

Hagland, H. M.: New order turret equipment developed,* 2–32.

Hannum, U. S.: Place used magneto sets in condition, 12–8.

Hanny, Marie: Traffic lends a hand in keeping highways and byways clear, 1–15.

Henry, Wm. C.: Reducing expenses to conform to income,* 20–8.

Holmes, J. H.: Some comments from Rumania on transmission testing,* 22–23.

Hughes, Dan:
Kansas association meets at Abilene,* 16–14.
Right now is the time to sell service,* 23–14.

Hummel, Robert C.: The passing of Adario—engineering of small Ohio exchange, 15–15.

Hutchins, W. J.: The improving of public relations,* 10–12.

Jordan, C. M.: Laying the foundation of prosperity for 1933, 3–34.

Keyes, E. F.: Suspension stresses in aerial leads,* 6–10.

Kilmer, Joseph T.: Capacity meter to determine distance to cable circuit "open,"* 10–17.

Knefel, F. B.:
Bloomfield, Iowa, solves exchange problem,* 4–33.
Cambridge, Neb., modernized,* 22–33.

Kugelman, C. W.:
Bird traps and short-circuits on rural lines, 4–26.
Running down eavesdroppers on rural telephone line, 5–24.

McBerty, F. R.: Remote-controlled telephone exchange,* 21–25.

McCarthy, Mary C.: Connecting company public relations, 13–15.

McCorkle, G. K.: The value of a personalized service,* 22–10.

McCulla, H. F.: In a time like this—we find?—and do?,* 16–10.

Milhollan, Frank: The depression and utility regulation,* 7–10.

Motter, C. W.: Weakest link in telephone sales chain,* 6–15.

Neary, Sara E.: Accuracy and the timing of toll tickets, 6–16.

Osborne, R. S.: "Demand trunk working" in England,* 12–32.

Pascarella, A. J.: An improved bridge for toll test boards,* 11–13.

Paul, T. J.: No long life dry cells in eavesdroppers' telephones, 9–18.

Pogue, A. B.: Marianna, Fla., has new service,* 20–33.

Ray, Myrtle: Value of good local telephone service, 15–8.

Reade, S. C.: Mediterranean Island's telephone service,* 19–33.

Runzel, W. L.: Supporting Independent manufacturers,* 13–16.

Rustan, Margaret: Promotion of sales by operators,* 9–16.

Safford, J. Warren:
Business outlook of telephone industry,* 4–10.
The maintenance of public relations,* 19–8.

Schnitzmeier, Pearl: Customer contacts, 19–13.

Seamark, H. A.: Equipment installed for future growth at Marseilles, Ill.,* 15–26.

Spaulding, Abbott D.: Our mind and our business today,* 11–10.

Stuber, Rosalie: Cooperation between toll and P. B. X. operators, 2–23.

Talmage, T. De Witt: New developments in making wire joints,* 19–11.

Tatum, Winifred: Borrowed telephones, 9–24.

Tilley, C. M.: Common-sense pole specifications,* 14–36.

Townsend, D. H.: Exchange pole-changers can be whipped,* 21–8.

Trierweiler, Chas. H.: Signs on telephone poles; does not allow them to remain, 10–24.

Tucker, H. C.: Locating moisture in dry-paper, insulated telephone cables, 13–23.

Van Nievelt, H. A.: Some comments from Rumania on transmission testing,* 22–23.

Wilder, R. F.: The telephone industry in Minnesota,* 5–16.

Wilhelm, Mary E.: Section management in the central office, 3–10.

Williams, H. S.: New police system at Middletown, Ohio,* 1–30.

Winemiller, P.: A modern small exchange in Union, Mo.,* 13–30.

Wolle, H. R.: Telephone service and public relations with subscribers, 23–17.

Workman, Mrs. Mayme:
On the outside looking in, 25–8.
What operators want to know, 1–14, 2–15, 3–12, 4–14, 5–15, 6–14, 7–24, 8–13, 9–14, 10–11, 11–16, 12–10, 13–12, 14–14, 15–10, 16–13, 17–16, 18–16, 19–10, 20–10, 21–12, 22–12, 23–24, 24–11, 25–11.

Conversion Table—Issue Number to Date of Issue.

No. 1	January 7	No. 10	March 11	No. 18	May 6
No. 2	January 14	No. 11	March 18	No. 19	May 13
No. 3	January 21	No. 12	March 25	No. 20	May 20
No. 4	January 28	No. 13	April 1	No. 21	May 27
No. 5	February 4	No. 14	April 8	No. 22	June 3
No. 6	February 11	No. 15	April 15	No. 23	June 10
No. 7	February 18	No. 16	April 22	No. 24	June 17
No. 8	February 25	No. 17	April 29	No. 25	June 24
No. 9	March 4				